



1745  
JFW  
1

Applicant's Docket No.: 791\_065 CON

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the application of: Hiroshi Nemoto and Kenshin Kitoh

Ser. No.: 09/997,604

Group Art Unit: 1745

Filed: November 29, 2001

Examiner: Susy N Tsang-Foster

For: LITHIUM SECONDARY BATTERY

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on May 13, 2004.

*Melissa T. Kuczynski*  
Melissa T. Kuczynski

**REQUEST FOR CORRECTION OF PATENT OFFICE RECORDS AND  
RECONSIDERATION AND WITHDRAWAL OF ERRONEOUS HOLDING OF  
ABANDONMENT**

SIR:

A Notice of Abandonment (copy attached) was mailed from the U.S. Patent and Trademark Office on May 5, 2004. The Notice of Abandonment included statements that (1) "[t]his application is abandoned in view of: Applicant's failure to timely file a proper reply to the Office letter mailed on 03 September 2003." and (2) "[t]he RCE request filed on 2/3/2004 did not contain any submission."

A Final Office Action was mailed from the U.S. PTO on September 3, 2003. In response to the September 3, 2003 Office Action, on January 5, 2004, the applicants submitted a Request for Reconsideration (copy attached) which addressed each of the rejections contained in the September 3, 2003 final rejection. The U.S. PTO issued an Advisory Action dated January 27, 2004, stating that "[t]he reply filed 05 January 2004 fails to place this application in condition for allowance" and that "[f]or purposes of appeal, the proposed amendment(s) will be entered". On February 3, 2004, the applicants filed a

Request for Continued Examination under 37 CFR 1.114 (copy attached), along with a check which included the fee under 37 CFR 1.17(e).

Under 37 CFR 1.114, if prosecution in an application is closed, an applicant may request continued examination of the application by filing a submission and the fee set forth in 37 CFR 1.17(e) prior to the earliest of: (1) payment of the Issue Fee, (2) abandonment of the application; or (3) the filing of a Notice of Appeal. There is no dispute that the Request for Continued Examination, the fee under 37 CFR 1.17(e) and the Request for Reconsideration filed January 5, 2004 were all filed prior to the earliest of payment of the Issue Fee, abandonment of the application or filing of a Notice of Appeal. MPEP §706.07(h) specifies under the heading "II. Submission Requirement" that "[a]rguments submitted after final rejection, which were entered by the Examiner but not found persuasive, may satisfy the submission requirement if such arguments are responsive within the meaning of 37 CFR 1.111 to the Office action". The Request for Reconsideration filed January 5, 2004 was responsive (within the meaning of 37 CFR 1.111) to the Final Office Action dated September 3, 2003, because it contained arguments in response to each of the rejections contained in the Final Office Action. Accordingly, the Request for Reconsideration filed January 5, 2004 satisfies the submission requirement under 37 CFR 1.114. Accordingly, all of the requirements of 37 CFR 1.114 have been satisfied.

In response to a series of telephone discussions between the undersigned and Examiner Foster and between the undersigned and S.P.E. Ryan, in which the points described above were discussed in detail, the undersigned received a telephone message from Examiner Foster on May 12, 2004 indicating that the holding of abandonment was erroneous and would be immediately withdrawn.

In view of the above, it is respectfully requested that the present application immediately be withdrawn from abandonment, that prosecution resume, and that a written notice withdrawing the abandonment be sent to the undersigned. The applicants also respectfully request that the records of the U.S. PTO be corrected to show that a proper response was timely filed.

It is respectfully submitted that any fees associated with the present communication should be waived because the evidence submitted herewith shows that the applicants are in no way at fault, and that a timely response was filed.

Nevertheless, the Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1446.

Respectfully submitted,



Kevin C. Brown  
Reg. No. 32,402

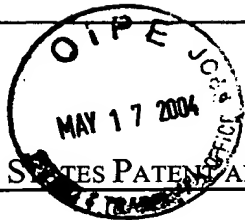
May 13, 2004

Date

KCB/mtk

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P.O. Box 7068  
Syracuse, NY 13261-7068

Customer No.: 025191  
Telephone: (315) 233-8300  
Facsimile: (315) 233-8320



UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,604	11/29/2001	Hiroshi Nemoto	791_065	5235
25191	7590	05/05/2004		
BURR & BROWN PO BOX 7068 SYRACUSE, NY 13261-7068				

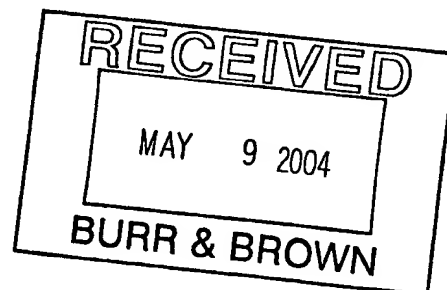
EXAMINER
TSANG FOSTER, SUSY N

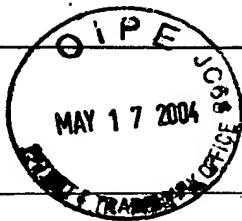
ART UNIT	PAPER NUMBER
1745	

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**COPY**





### Notice of Abandonment

Application No.

09/997,604

Examiner

Susy N Tsang-Foster

Applicant(s)

NEMOTO ET AL.

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on 03 September 2003.
  - (a) ☐ A reply was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply (including a total extension of time of \_\_\_\_\_ month(s)) which expired on \_\_\_\_\_.
  - (b) ☒ A proposed reply was received on 03 February 2004, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.

(A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
  - (c) ☐ A reply was received on \_\_\_\_\_ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
  - (d) ☐ No reply has been received.
2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
  - (a) ☐ The issue fee and publication fee, if applicable, was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
  - (b) ☐ The submitted fee of \$\_\_\_\_\_ is insufficient. A balance of \$\_\_\_\_\_ is due.

The issue fee required by 37 CFR 1.18 is \$\_\_\_\_\_. The publication fee, if required by 37 CFR 1.18(d), is \$\_\_\_\_\_.
  - (c) ☐ The issue fee and publication fee, if applicable, has not been received.
3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
  - (a) ☐ Proposed corrected drawings were received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply.
  - (b) ☐ No corrected drawings have been received.
4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.
5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.
6. ☐ The decision by the Board of Patent Appeals and Interference rendered on \_\_\_\_\_ and because the period for seeking court review of the decision has expired and there are no allowed claims.
7. ☒ The reason(s) below:

The RCE request filed on 2/3/2004 did not contain any submission. A copy of that RCE request is attached for applicant's convenience.

# COPY

*Susy N Tsang-Foster*

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.



02-04-04 Image RCE/1700

PATENT

Practitioner's Docket No.: 791\_065 CON

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Hiroshi Nemoto and Kënshin Kitch

Ser. No.: 09/997,604

Group Art Unit: 1745

Filed: November 29, 2001

Examiner: Susy N Tsang-Foster

Confirmation No.: 5235

For: LITHIUM SECONDARY BATTERY

Mail Stop RCE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 addressed to Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on February 3, 2004 under "EXPRESS MAIL" mailing label number EL 99443 5343 US.

Janet M. Stevens

REQUEST FOR CONTINUED EXAMINATION (RCE)  
(37 C.F.R. 1.114)

1. Applicant hereby requests continued examination, in accordance with 37 C.F.R. § 1.114, for the above identified application.

TIME REQUEST IS BEING MADE

2. This request is being submitted (check appropriate item(s) below):

- i. ☒ Prior to abandonment of the application
- ii. ☐ Payment of the issue fee
  - ☐ Prior to payment of issue fee
  - ☐ Issue fee has been paid but a petition under § 1.313 was filed (copy attached).
- iii. ☐ Prior to a decision on appeal to the Board of Patent Appeals & Interferences
  - ☐ A notice is being separately sent to the Board of Patent Appeals & Interferences that this Request for Continued Examination is being filed.
- iv. ☐ Appeal to the U.S. Court of Appeals of the Federal Circuit under 35 U.S.C. 145 or
  - ☐ Commencement of a civil action under 35 U.S.C. 146
    - ☐ Prior to the filing of such appeal or commencement of civil action
    - ☐ Such appeal or commencement of civil action has been terminated

PREVIOUSLY SUBMITTED DOCUMENTS

3. Please Enter and Consider the following Previously Submitted Documents:

- ☐ Amendment filed \_\_\_\_\_.
- ☐ Brief on Appeal filed \_\_\_\_\_.
- ☐ Other:

02/05/2004 EFLDRES 00000084 09997604

01 FC:1801

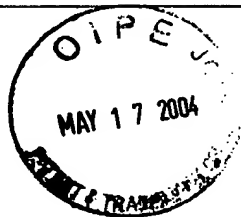
770.00 OP

02/05/2004 EFLDRES 00000084 09997604

02 FC:1252

310.00 OP

**COPY**



- 2 -

### ENCLOSURES

4. Enclosed herewith is/are:

- ☐ An Information Disclosure Statement and Form PTO-1449
- ☐ An Identification of Copending Application(s) and Form PTO-1449
- ☐ An Amendment
- ☐ New arguments
- ☐ New evidence in support of patentability
- ☐ Other:

### FEE FOR REQUEST (37 C.F.R. § 1.17(e)).

5. This application is on behalf of:

- ☐ Small entity (and status is still as small entity) \$385.00
- ☒ Other than a small entity \$770.00
- Continued Prosecution Request Fee \$770.00

### FEE FOR CLAIMS

6. The fee for claims (37 C.F.R. § 1.16(b)-(d)) has been calculated as shown below:

(1)	(2) Claims Remaining After Amendment	(3)	(4) Highest Number Previously Paid	(5) No. of Extra Claims Present	(6) Rate	(7) Additional Fee
TOTAL CLAIMS	14	MINUS	20	0	0	0
INDEP. CLAIMS	2	MINUS	3	0	0	0
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT						0

(c) ☒ No additional fee is required.

OR

(d) ☐ Total additional fee required is \$.

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**EXTENSION OF TIME**

7. The proceedings herein are for a patent application, and the provisions of 37 C.F.R. § 1.136(a) apply.

(a) ☒ Applicant petitions for an extension of time, the fees for which are set out in 37 C.F.R. § 1.17(a)(1)-(4), for the total number of months checked below:

Extension (Months)		Fee for other than small entity	Fee for small entity
	One Month	\$ 110.00	\$ 55.00
✓	Two Months	\$ 420.00	\$ 210.00
	Three Months	\$ 950.00	\$ 475.00
	Four Months	\$1,480.00	\$ 740.00

Extension Fee

\$ 420.00

If an additional extension of time is required, please consider this a petition therefor.

☒ An extension for one month has already been secured, and the fee paid therefor of \$110.00 is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request \$310.00

**OR**

(b) ☐ Applicant believes that no extension of time is required. However, this is a conditional petition and authorization to pay the necessary fees to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

**TOTAL FEE(S) DUE**

8. The total fee(s) due is/are:

Continued Prosecution Fee (§ 1.17(e))	\$770.00
Fee(s) for additional claims (if any) (§ 1.16(b)-(d))	\$
Extension of time fee (if any) (§ 1.17(a)(1)-(4))	\$310.00

**Total Fee(s) Due: \$1,080.00**

**COPY**



**PAYMENT OF FEE(S) DUE**

9. Please pay the fee(s) for this continued examination application as follows:

☒ Check is attached for the sum of \$1,080.00

☐ Charge Deposit Account No. 50-1446 the sum of \$

☒ Please charge any required additional fee(s) for § 1.17(e), § 1.16(b)-(d) and/or § 1.17(a)(1)-(4) to Deposit Account No. 50-1446.

February 3, 2004

Date

Respectfully submitted,



Kevin C. Brown

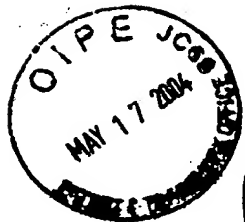
Reg. No. 32,402

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Facsimile: (315) 233-8320

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d a check in the amount of

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with a Petition for Extension of Time (one-month) (1 page) (in duplicate), a  
Request for Reconsideration (pages 1-6) and a check in the amount of  
\$110.00 for:

(791\_065 CON - Watanabe)  
Hiroschi Nemoto and Kenshin Kitoh  
Ser. No.: 09/997,604  
Filed: November 29, 2001  
Art Unit: 1745  
Confirmation No.: 5235  
For: LITHIUM SECONDARY BATTERY



Mailing Date: January 5, 2004

Atty: KCB:jms

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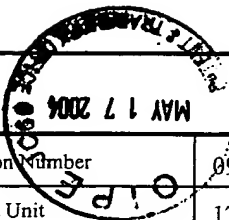
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791\_065 CON Extension of Time (1 month)

M&T - Operating



# PATENT AMENDMENT TRANSMITTAL

(Provisions of 37 CFR 1.136 Apply)

Application Number	09/997,604	Filing Date	November 29, 2001
Group Art Unit	1745	Examiner Name	Susy N Tsang-Foster
Confirmation No.	5235	Attorney Docket No.	791_065 CON
Inventor(s)	Hiroshi Nemoto and Kenshin Kitoh		
Invention:	LITHIUM SECONDARY BATTERY		

Transmitted herewith is an Amendment in the above-identified application. The fee has been calculated as follows:

## CLAIMS AS AMENDED

(1)	(2) Claims Remaining After Amendment	(3)	(4) Highest Number Previously Paid	(5) No. of Extra Claims Present	(6) Rate (Large Entity)	(7) Additional Fee
TOTAL CLAIMS	14	MINUS	20	0	\$18.00	\$00.00
INDEP. CLAIMS	2	MINUS	3	0	\$86.00	\$00.00
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT						\$00.00

## EXTENSION OF TERM

☐ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.

☒ This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application. The requested extension and appropriate non-small entity fee are as follows:

<input checked="" type="checkbox"/> One Month (37 CFR 1.17(a)(1) .....	\$110.00	110.00
<input type="checkbox"/> Two Month (37 CFR 1.17(a)(2) .....	\$420.00	
<input type="checkbox"/> Three Month (37 CFR 1.17(a)(3) .....	\$950.00	

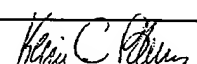
## TOTAL FEES DUE

☐ Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee amount is reduced by one-half, and the resulting fee is:

## FEE PAYMENT

- ☐ No additional fee is required.
- ☒ A check in the amount of \$110.00 is enclosed.
- ☐ Charge Deposit Account 50-1446 in the amount of \$. Enclosed is a duplicate copy of this sheet.
- ☒ Please charge any fees which may be required, or credit any overpayment, to Deposit Account 50-1446.

### Submitted By:

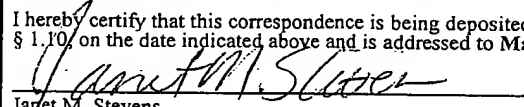
Name (Print Type)	Kevin C. Brown	Reg. No.	32,402	Customer No.	025191
		Telephone	(315) 233-8300	Facsimile	(315) 233-8320
Signature		Date	January 5, 2004		

## EXPRESS MAIL CERTIFICATE

"Express Mail" label number EL 99443 5238 US

Date of Deposit: January 5, 2004

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR § 1.110, on the date indicated above and is addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Janet M. Stevens

# COPY



Patent's Docket No.: 791\_065 CON

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the application of: Hiroshi Nemoto and Kenshin Kitoh

Ser. No.: 09/997,604

Group Art Unit: 1745

Filed: November 29, 2001

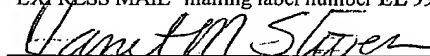
Examiner: Susy N Tsang-Foster

Confirmation No.: 5235

For: LITHIUM SECONDARY BATTERY

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P.O. Box 1450  
Alexandria, VA 22313-1450

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Janet M. Stevens

**REQUEST FOR RECONSIDERATION**

Sir:

The following is in response to the Office Action mailed September 3, 2003.

Claims 10-23 remain pending herein.

Claims 12 and 19 were rejected under 35 USC 112, first paragraph.

The Office Action contains statements to the effect that although the specification discloses batteries in which the primary particles of the positive electrode active material *include* particles having at least one side of each flat crystal face of length of 1  $\mu\text{m}$  or more, the specification does not provide support for a battery in which the primary particles of the positive electrode active material *all* have at least one side of each flat crystal face of length 1  $\mu\text{m}$  or more. It is respectfully noted that claims 12 and 19 do not recite that *all* of the primary particles of the positive electrode active material have at least one side of each flat crystal face of length of 1  $\mu\text{m}$  or more. Rather, claims 12 and 19 recite that the primary particles *consist essentially of* particles having at least one side of each flat crystal face of length of 1  $\mu\text{m}$  or more, meaning that the primary particles of the positive electrode active material can include non-conforming particles (i.e., particles which do not have at least one side of each flat crystal face of length of 1  $\mu\text{m}$  or more), so long as there are not so many of such non-conforming particles that the basic and novel characteristics of the present invention are materially affected. That is, as has been repeatedly and consistently held, the expression

**COPY**

"consisting essentially of" renders the claim open only for the inclusion of unspecified ingredients which do not materially affect the basic and novel characteristics of the claimed invention (e.g., *ex parte Davis and Tuukkanen*, 80 USPQ 448,450 (Pat. Ofc. Bd. App. 1948). Those basic and novel characteristics of the invention include significant reduction in internal resistance and good repeated cycle properties, as described throughout the present specification. Completely consistent with the above is the portion of the specification referred to in the Office Action where it is disclosed that the "positive electrode active material. . . is characterized by consisting of primary particles *mostly* having the above-mentioned morphology [emphasis added]."

The Office Action further contains a statement that the specification "states that the particle diameters of the primary particles are obtained by analysis of the SEM image and the particle diameter measurement for individual particles are impossible." This statement leaves out a critical portion of the statement in the specification to which it refers. In particular, the statement in the specification reads "[t]he particle diameters of the primary particles are expressed as particle diameters obtained by the analysis of SEM image because the separation of individual particles and the particle diameter measurement for individual particles are impossible." The complete statement in the specification clearly describes that particle diameters of the primary particles are expressed as particle diameters obtained by the analysis of SEM image, and that the reason particle diameters of the primary particles are expressed in this way is because the separation of individual particles is impossible. This statement in no way indicates that expression of particle diameters of the primary particles is impossible.

The Office Action further contains statements to the effect that the specification indicates that the amount of particles having particle diameters outside the specified ranges are at a level not ordinarily detected in the measurement methods described in the specification. As noted above, the recitation "consisting essentially of" does not require that *every* primary particle satisfy the recited feature, but rather that the amount (if any) of primary particles not satisfying the recited feature is not so large as to materially affect the basic and novel characteristics of the present invention.

In view of the above, it is respectfully requested that the U.S. Patent and Trademark Office reconsider and withdraw this rejection.

Claims 10-14 and 17-21 were rejected under 35 U.S.C. §102(b) or under 35 U.S.C. §103(a) over Japanese 8-217452 (JP '452).

The present invention is directed to a method of reducing internal resistance of a lithium secondary battery. The method comprises forming an electrode body which includes a positive electrode comprising positive electrode active material, the primary particles of which have a substantially octahedral shape constituted mainly by flat crystal faces, such primary particles including particles having at least one side of each flat crystal face of length of 1  $\mu\text{m}$  or more.

JP '452 is directed to a *needle-like* particle shape manganese complex oxide. The statements in the Office Action overlook the express statements in JP '452 that the particles of JP '452 are *needle-like*. Attached to the September 3, 2003 Office Action was a paper entitled "Six-Fold Regular Octahedron", which shows that a regular octahedron has eight equilateral triangles as faces. The U.S. Patent and Trademark Office attempts to argue that a *needle-like* regular octahedron would have the same shape, i.e., that the expression "needle-like" does not carry with it any meaning at all. To the contrary, a regular octahedron needle-like particle consists of a pair of regular octahedral-shaped end regions having an extension portion therebetween, rendering the particle "needle-like." It is further noted that the expression "regular-octahedron needle-like" is far more descriptive of the shape to which it refers than is the expression "dodecahedral" (i.e., any shape having twelve surfaces).

The Office Action further contains a statement that "the positive electrode active material has the same particle shape, composition, and primary particle size as those disclose in the specification and being claimed in the instant claims . . .".

The present specification discloses that production of the positive electrode active material of the present invention is conducted by firing a raw material mixture consisting of given proportions of salts and/or oxides of various elements in an oxidizing atmosphere at 700 to 900°C for five to fifty hours (original specification, page 11, lines 5-10). The specification further discloses that when the firing temperature is low, growth of particles hardly takes place, making it difficult to obtain a positive electrode active material constituted by primary particles having intended particle diameters and an intended shape, whereas when the firing temperature is high, large primary particles are formed but neck growth occurs between primary particles and each neck portion becomes rounded (original specification,

page 11, lines 11-17). Thus, the specification discloses, by selecting the composition of raw materials and the firing conditions appropriately, it is possible to control the average particle diameter of the primary particles obtained and the morphology of the primary particles (original specification, page 12, lines 3-6). For example, the specification discloses, in the positive electrode active material of comparative example 2, in which a positive electrode active material was obtained by weighing and mixing powders of  $\text{Li}_2\text{CO}_3$ ,  $\text{MnO}_2$  and  $\text{B}_2\text{O}_3$  and then firing the resulting mixture in an oxidizing mixture at  $800^\circ\text{C}$  for twenty-four hours, striking particle growth was observed and the primary particles were roundish, and that primary particles having a substantially octahedral shape could be obtained by lowering the synthesis temperature and/or shortening the synthesis time in order to suppress the particle growth (original specification, page 12, lines 6-12 and page 14, lines 10-14). In other words, even within the broad description of the process set forth in the present specification, page 11, lines 5-10, obtaining the properties recited in the present claims is clearly not inherent. With the guidance provided in the present specification (e.g., page 12, lines 9-12), persons of skill in the art are provided with the information needed in order to be readily able to produce positive active material which does satisfy the parameters recited in the claims by appropriate selection of raw materials and firing conditions within the scope of the process described in page 11, lines 5-10, without having to engage in an undue amount of experimentation. Without the guidance provided by the present specification or the subject matter recited in the present claims, persons of skill in the art would have no reason to attempt to make selections from within the broad disclosure in JP '452 so as to arrive at a battery having a positive electrode comprising positive electrode active material which satisfies the features recited in the present claims. In fact, JP '452 instead motivates persons of skill in the art to attempt to select process conditions and raw materials so as to obtain *regular octahedron needle-like* particles which are then used as a positive electrode active substance.

In view of the of the above, it is respectfully requested that the U.S. Patent and Trademark Office reconsider and withdraw this rejection.

Claims 10-14 and 17-21 were rejected under 35 U.S.C. §102(b) or under 35 U.S.C. §103(a) over U.S. Patent No. 5,631,104 (Zhong '104).

As discussed above, and as demonstrated in the Example and Comparative Examples in the present specification, processing positive electrode active material in the manner

described in the present specification, page 11, lines 5-10, does not inherently result in production of positive electrode active material having the characteristics recited in the present claims. The specification includes description of an Example in accordance with the present invention, in which a positive electrode active material was produced which consisted of primary particles having a substantially octahedral shape. The procedures described in Zhong '104 clearly differ from the method used in the Example. There is clearly no basis for the statements in the Office Action to the effect that Zhong '104 discloses identical synthesis conditions and formulas as those of the present applicant, or that the properties recited in the present claims would be inherent (such inherency is clearly disproved by the Comparative Examples reported in the present specification).

Moreover, the process conditions employed in Comparative Examples 1 and 2 were identical to those employed in the Example (differing starting materials were employed) and the Comparative Examples *did not* achieve primary particles having substantially octahedral shape, whereas the Example *did* achieve such primary particles. Accordingly, the Comparative Examples reported in the present specification are closer to the present invention than are the various disclosures in Zhong '104, thereby further disproving the notion of inherency advanced in the Office Action.

In view of the above, it is respectfully requested that the U.S. Patent and Trademark Office reconsider and withdraw this rejection.

Claims 10-14 and 17-21 were rejected under 35 U.S.C. §102(e) or 35 U.S.C. §103(a) over U.S. Patent No. 5,961,949 (Manev '949).

Again, as discussed above, and as demonstrated in the Example and Comparative Examples in the present specification, processing positive electrode active material in the manner described in the present specification, page 11, lines 5-10, does not inherently result in production of positive electrode active material having the characteristics recited in the present claims. As noted above, the specification includes description of an Example in accordance with the present invention, in which a positive electrode active material was produced which consisted of primary particles having a substantially octahedral shape. The procedures described in Manev '949 clearly differ from the method used in the Example. There is clearly no basis for the statements in the Office Action to the effect that Manev '949 discloses identical synthesis condition and formulas as those of the present applicant, or that



the properties recited in the present claims would be inherent (such inherency is clearly disproved by the Comparative Examples reported in the present specification).

Moreover, as noted above, the Comparative Examples reported in the present specification (in which primary particles having substantially octahedral shape *were not* obtained) are closer to the present invention than are the various disclosures in Manev '949, thereby further disproving the notion of inherency advanced in the Office Action.

Claims 15, 16, 22 and 23 were rejected under 35 U.S.C. §103(a) over each of JP '452, Zhong '104 and Manev '949, each in view of U.S. Patent No. 5,700,597 (Zhong '597).

In each rejection, Zhong '597 is relied on in the Office Action for alleged disclosure of high energy density. Accordingly, any such disclosure in Zhong '597 would not overcome the shortcomings of the respective primary references as attempted to be applied against claims 10 and 17, from which each of claims 15, 16, 22 and 23 ultimately depend.

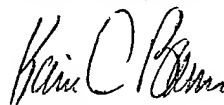
It is therefore respectfully requested that the U.S. Patent and Trademark Office reconsider and withdraw these rejections.

In view of the above, claims 10-23 are in condition for allowance.

If the Examiner believes that contact with Applicants' attorney would be advantageous toward the disposition of this case, the Examiner is herein requested to call Applicants' attorney at the phone number noted below.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1446.

Respectfully submitted,



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January 5, 2004

Date

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